

REMARKS

Claims 9, 11-26 and 29-36 are pending. Claims 27-28 have been canceled and claims 17, 24 and 35 have been amended.

Claims 24-31 stand rejected under 35 U.S.C. 102(e) as being anticipated by Beckham et al. (US 6,191,215). Applicants respectfully traverse this rejection. The polymers disclosed by Beckham et al. are obtained by a process comprising the polymerization of N-vinyl lactams and further nitrogen-containing monomers in the presence of polyoxyalkylene-polysiloxane copolymers. Beckham et al. does not disclose polymers obtained by the free-radical polymerization of tert-butyl and/or methacrylic acid in the presence of polyalkylene oxide containing silicones of the formula I, as presently claimed.

Claims 9, 11-16, 18-23, 32-34 and 36 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Blankenburg (WO 99/04750) in view of Sramek (US 4,871,529) and Habek (JP 10-158140). Applicants respectfully traverse this rejection.

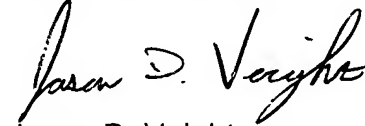
The present invention specifically improves properties of a cosmetic preparation to give better flexural rigidity and curl retention of the hair after application. As can be seen from Tables 1 to 3 (specification page 56 to 58), preparations comprising polymers obtained from the radical polymerization of tert-butyl acrylate and methacrylic acid in the presence of oxide containing silicones of the formula I (Luviflex® Silk) show much better flexural rigidity and curl retention values than polyvinyl lactam polymers alone. These performance properties demonstrate much more than an additive effect, but rather show a synergistic effect. The flexural rigidity in ethanolic solution of a 2:8 mixture of Vinyl lactam Copolymer Luviskol® VA 37 E or Luviskol® Plus with Luviflex®

Silk is 90 and 120 cN, respectively, whereas a simple additive effect would lead to values of 85.8 and 105.8 cN, respectively. The flexural rigidity of a film of Luviflex® Silk casted from ethanol is 109 cN. The flexural rigidity in VOC-80 formulations (which are important with respect to environmental protection) of a 2:8 mixture of Vinylactam Copolymer Luviskol® VA 37 E or Luviskol® Plus with Luviflex® Silk is 137 and 172 cN, respectively, whereas a simple additive effect would lead to values of 111 and 127 cN, respectively. The flexural rigidity of Luviflex® Silk casted from a VOC-80 solution is 109 cN. With respect to curl retention, particularly the values in the 1:1 mixtures, show significant difference compared to simple additive behavior.

The prior art would not have motivated or suggested to one of ordinary skill in the art to prepare compositions according to the present invention (i.e. claim 9) to achieve increased flexural rigidity and curl retention of the hair. Thus, the unexpected results of the present invention evidence its nonobviousness.

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Respectfully submitted,
KEIL & WEINKAUF

A handwritten signature in black ink, appearing to read "Jason D. Voight", written in a cursive style.

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